

Total No. of Questions : 12]

SEAT No. :

P3014

[Total No. of Pages : 2

B.E. (Computer Engineering) (Semester - I)
MULTIMEDIA SYSTEMS
(2008 Pattern) (Elective - II)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answers to the two sections should be written in separate answer books.*
- 2) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6 from Section -I & Q7 or Q8, Q9 or Q10, Q11 or Q12 from Section -II.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right side indicate full marks.*
- 5) *Use of Calculator is allowed.*
- 6) *Assume Suitable data if necessary.*

SECTION - I

- Q1)** a) What are the various devices used in multimedia systems? What are the different multimedia components present in Windows OS? [9]
- b) Explain with suitable examples multimedia building blocks and its role in development of web based multimedia applications. [9]

OR

- Q2)** a) Explain in brief Multimedia Architecture. How Windows supports multimedia? [9]
- b) What is Multimedia Authoring? Explain any three Multimedia Authoring Tools in brief. [9]

OR

- Q3)** a) What is histogram of an image? Write algorithm for computing histogram of 8 bit gray scale image? [8]
- b) Explain GIF & BMP file formats in brief. [8]
- Q4)** a) Explain image enhancement using point processing. [8]
- b) Classify Image Compression techniques. Discuss RLE stating example. [8]

P.T.O

- Q5)** a) What are different audio devices used in multimedia systems? Explain any four. [8]
b) Explain in brief WAV & VOC file formats. [8]

OR

- Q6)** a) What is MIDI? Explain in brief MIDI file format. [8]
b) How audio data is captured? What are the fundamental characteristics of audio data? How do you define quality of audio data? [8]

SECTION - II

- Q7)** a) Which are the different video broadcasting techniques? Explain various features of H.261 and H.263. [9]
b) Name different techniques used for text compression. Explain with suitable example Arithmetic coding applied to text data. [9]

OR

- Q8)** a) What are the features of MPEG in video compression? Define and explain I, P and B frames with reference to MPEG. [9]
b) Write Short note on Text file formats. [9]

- Q9)** a) Explain basic principles of 2D animation. [8]
b) What is Open GL? How it supports animation? [8]

OR

- Q10)** a) Explain major steps involved in 3D animation. [8]
b) Explain Client Pull & Server Push animation. [8]

- Q11)** a) State and explain any four applications of Multimedia over internet. [8]
b) State and explain the requirements of Multimedia applications on the network. [8]

OR

- Q12)** a) Explain how multimedia is used in Web based applications. [8]
b) Write short note Multimedia over IP. [8]

